

## Claims

1. An electrolytic polishing process for dental instruments of nickel-titanium alloy using an electrolyte comprising sulfuric acid and methanol, characterized by the fact that electricity is supplied by applying a current, the density of which is regulated so that it remains constant.
2. The process according to the preceding claim, further characterized by the fact that the current density is kept constant at a value comprised between  $10 \text{ A/dm}^2$  and  $30 \text{ A/dm}^2$ .
3. The process according to one of the preceding claims, further characterized by the fact that the electrolyte is a mixture of methanol and sulfuric acid comprising between 0.1 mole and 10 moles of sulfuric acid.
4. The process according to one of the preceding claims, further characterized by the fact that the cathode is formed by at least one platinum electrode and that the anode is formed by the parts to be treated.
5. The process according to one of the preceding claims, further characterized by the fact that the stirring rate of the parts is low, approximately 1 mm/s to 10 mm/s.
6. The process according to one of the preceding claims, further characterized by the fact that the parts to be treated are made of a titanium alloy having at least 40% by mass of titanium.